REMARKS

Initially, Applicants filed an Information Disclosure Statement (IDS) on July 6, 2005. The Examiner did not consider the non-patent document (i.e., "Copy of International Search Report for corresponding PCT application . . . "). Applicants respectfully request that the Examiner consider this document, initial at the appropriate place on the Form 1449, and return a copy of the Form 1449 with the next communication.

In the non-final Office Action, the Examiner rejected claims 1-16 and 18-22 under 35 U.S.C. § 112, second paragraph, as indefinite; rejected claims 1-5, 7, 9, 12, 14-19, and 21 under 35 U.S.C. § 102(b) as anticipated by Bowman et al. (U.S. Patent No. 6,006,225); rejected claims 6, 8, and 20 under 35 U.S.C. § 103(a) as unpatentable over Bowman et al. in view of Hovy et al. ("The Use of External Knowledge in Faction QA," November 2001); rejected claim 11 under 35 U.S.C. § 103(a) as unpatentable over Bowman et al. in view of Chaney et al. (U.S. Patent Application Publication No. 2004/0225681); rejected claim 13 under 35 U.S.C. § 103(a) as unpatentable over Bowman et al. in view of Schultz (U.S. Patent No. 5,640,553); and rejected claims 10 and 22 under 35 U.S.C. § 103(a) as unpatentable over Bowman et al. in view of Thompson et al. ("Name Searching and Information Retrieval," 1997).

By this Amendment, Applicants amend the specification to improve form, and amend claims 1, 3, 5-10, 12-14, and 17-22 to improve form. Applicants respectfully traverse the Examiner's rejections under 35 U.S.C. §§ 112, 102, and 103. Claims 1-22 remain pending.

REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

In paragraphs 2-5 of the Office Action, the Examiner rejected claims 1-16 and 18-22 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particular point out and distinctly claim that which Applicants regard as the invention. Applicants have amended the claims and submit that the claims, as amended herein, satisfy the requirements of 35 U.S.C. § 112, second paragraph.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-16 and 18-22 under 35 U.S.C. § 112, second paragraph.

REJECTION UNDER 35 U.S.C. § 102(b) BASED ON BOWMAN ET AL.

In paragraphs 6-21 of the Office Action, the Examiner rejected claims 1-5, 7, 9, 12, 14-19, and 21 under 35 U.S.C. § 102(b) as allegedly anticipated by Bowman et al. Applicants respectfully traverse the rejection.

A proper rejection under 35 U.S.C. § 102 requires that a single reference teach every aspect of the claimed invention. Any feature not directly taught must be inherently present. In other words, the identical invention must be shown in as complete detail as contained in the claim. See M.P.E.P. § 2131. Bowman et al. does not disclose or suggest the combination of features recited in claims 1-5, 7, 9, 12, 14-19, and 21.

Amended independent claim 1, for example, is directed to a method, comprising receiving a search query; determining whether the received search query includes an entity name; determining whether the entity name corresponds to one of a plurality of common words or phrases; selectively rewriting the received search query based on whether the entity name is determined to correspond to one of the common words or

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phrases; performing a search based on the received search query or the rewritten search query to obtain search results; and presenting the search results.

Bowman et al. does not disclose the combination of features recited in claim 1. For example, Bowman et al. does not disclose or suggest determining whether a received search query includes an entity name.

The Examiner alleged that Bowman et al. discloses this feature and cited column 6, lines 59-64, of Bowman et al. for support (Office Action, paragraph 7). Applicants disagree.

At column 6, lines 59-64, Bowman et al. discloses:

> As further depicted by FIG. 1, each related term and each key term 140
> preferably includes a single-character field prefix which indicates the search field
> 210, 220, 240 to which the term corresponds. These prefixes may, for example,
> be as follows: A=author, T=title, S=subject, R=artist, L=label, G=generic.

In this section, Bowman et al. discloses that each key term and related term includes a character field prefix that identifies the search field (author field, title field, subject field, artist field, label field, and generic field) corresponding to the term. Nowhere in this section, or elsewhere, does Bowman et al. disclose or remotely suggest determining whether a received search query includes an entity name, as required by claim 1.

Bowman et al. also does not disclose or suggest determining whether the entity name corresponds to one of a plurality of common words or phrases, as further recited in claim 1. The Examiner alleged that Bowman et al. discloses this feature and cited column 6, line 64 - column 7, line 5, of Bowman et al. for support (Office Action, paragraph 7). Applicants disagree.

At column 6, line 64 - column 7, line 10, Bowman et al. discloses:

> In addition, each related term is stored together with a correlation score 146 which, in the preferred embodiment, indicates the number of times the related term has appeared in combination with the key term (within the search fields indicated by their respective field prefixes), not counting queries that produced a NULL query result.

> Thus, for example, the related term (including prefix) S-ASTRONOMY has a correlation score of 410 under the key term T-COSMOS, indicating that four hundred and ten "successful" queries were received (during the time period to which the table 137 corresponds) which included the combination of COSMOS in the title field and ASTRONOMY in the subject field.

In this section, Bowman et al. discloses a correlation score that indicates the number of times that the related term has appeared in combination with the key term in past queries. Nowhere in this section, or elsewhere, does Bowman et al. disclose or remotely suggest determining whether anything in a search query corresponds to a common word or phrase, let alone determining whether an entity name corresponds to one of a plurality of common words or phrases, as required by claim 1.

For at least these reasons, Applicants submit that claim 1 is not anticipated by Bowman et al. Claims 2-5, 7, 9, and 12 depend from claim 1 and are, therefore, not anticipated by Bowman et al. for at least the reasons given with regard to claim 1. Claims 2-5, 7, 9, and 12 are also not anticipated by Bowman et al. for reasons of their own.

For example, amended claim 7 recites that determining whether the entity name corresponds to one of the common words or phrases comprises comparing the entity name to a dictionary of words or phrases. Bowman et al. does not disclose or suggest this feature.

The Examiner alleged that <u>Bowman et al.</u> discloses this feature and cited Figure 7 and Figure 5A of <u>Bowman et al.</u> for support (Office Action, paragraph 12). Applicants disagree.

With regard to Figure 7, <u>Bowman et al.</u> discloses steps performed for identifying related terms in a correlation table that relate to a query term (col. 12, lines 42-67). Contrary to the Examiner's apparent allegation, nowhere does <u>Bowman et al.</u> disclose or remotely suggest that the correlation table corresponds to a dictionary of words or phrases, as would be required by claim 7. Instead, <u>Bowman et al.</u> specifically discloses that the correlation table includes a list of related terms that have been identified as occurring in relation to query terms in past search queries (col. 2, lines 28-37).

With regard to Figure 5A, <u>Bowman et al.</u> illustrates a mapping of query terms to related terms (col. 10, lines 25-49). Nowhere does <u>Bowman et al.</u> disclose or remotely suggest that the related terms are words or phrases in a dictionary, as would be required by claim 7. Instead, <u>Bowman et al.</u> specifically discloses that the correlation table includes a list of related terms that have been identified as occurring in relation to query terms in past search queries (col. 2, lines 28-37).

For at least these additional reasons, Applicants submit that claim 7 is not anticipated by <u>Bowman et al.</u>

Amended claim 9 recites that determining whether the entity name corresponds to one of the common words or phrases comprises generating a table of entity names that correspond to the common words or phrases, and determining whether the entity name

corresponds to one of the common words or phrases based on the table. Bowman et al. does not disclose or suggest these features.

The Examiner alleged that Bowman et al. discloses these features and cited Figure 5A and column 2, lines 47-63, of Bowman et al. for support (Office Action, paragraph 13). Applicants disagree.

With regard to Figure 5A, Bowman et al. illustrates a mapping of query terms to related terms (col. 10, lines 25-49). Nowhere does Bowman et al. disclose or remotely suggest that the related terms are entity names that correspond to common words or phrases, as would be required by claim 9. Instead, Bowman et al. specifically discloses that the correlation table includes a list of related terms that have been identified as occurring in relation to query terms in past search queries (col. 2, lines 28-37).

At column 2, lines 47-63, Bowman et al. discloses:

> In accordance with one aspect of the invention, the correlation data is stored in a correlation data structure (table, database, etc.) which is used to look up related terms in response to query submissions. The data structure is preferably generated using an off-line process which parses a query log file, but could alternatively be generated and updated in real-time as queries are received from users. In one embodiment, the data structure is regenerated periodically (e.g., once per day) from the most recent query submissions (e.g., the last M days of entries in the query log), and thus strongly reflects the current tastes of the community of users; as a result, the related terms suggested by the search engine strongly reflect the current tastes of the community. Thus, for example, in the context of a search engine of an online merchant, the search engine tends to suggest related terms that correspond to the current best-selling products.

In this section, Bowman et al. discloses a correlation data structure that is used to look up related terms in response to query submissions. Nowhere in this section, or elsewhere, does Bowman et al. disclose or remotely suggest that the related terms are entity names that correspond to common words or phrases, as would be required by claim 9. Instead,

Bowman et al. specifically discloses that the correlation table includes a list of related terms that have been identified as occurring in relation to query terms in past search queries (col. 2, lines 28-37).

For at least these additional reasons, Applicants submit that claim 9 is not anticipated by Bowman et al.

Amended independent claim 14 recites features similar to, yet possibly different in scope from, features recited in claim 1. Claim 14 is, therefore, not anticipated by Bowman et al. for at least reasons similar to reasons given with regard to claim 1. Claims 15 and 16 depend from claim 14 and are, therefore, not anticipated by Bowman et al. for at least the reasons given with regard to claim 14.

Amended independent claim 17 is directed to a system comprising a memory and a processor, connected to the memory, to receive a search query, determine whether the received search query includes an entity name, and selectively rewrite the received search query to obtain a rewritten search query when it is determined that the received search query includes an entity name, the rewritten search query including a restrict identifier that restricts a search associated with the rewritten search query to a particular domain associated with the entity name.

Bowman et al. does not disclose or suggest the combination of features recited in claim 17. For example, Bowman et al. does not disclose or suggest a processor to selectively rewrite a received search query to obtain a rewritten search query when it is determined that the received search query includes an entity name, where the rewritten search query includes a restrict identifier that restricts a search associated with the

rewritten search query to a particular domain associated with the entity name. In fact Bowman et al. does not disclose or remotely suggest anything similar to a restrict identifier.

For at least these reasons, Applicants submit that claim 17 is not anticipated by Bowman et al.

Amended claim 18 is directed to a method comprising determining a plurality of entity names; determining whether each of the entity names corresponds to one of a plurality of common words or phrases; and generating a table of the entity names that correspond to the common words or phrases.

Bowman et al. does not disclose or suggest the combination of features recited in claim 18. For example, Bowman et al. does not disclose or suggest determining whether each of the entity names corresponds to one of a plurality of common words or phrases.

The Examiner rejected this feature by referring generally to the rejection of claim 1 (Office Action, paragraph 19). Applicants respectfully disagree for at least reasons similar to reasons given with regard to claim 1.

Bowman et al. also does not disclose or suggest generating a table of the entity names that correspond to the common words or phrases, as further recited in claim 18. The Examiner alleged that Bowman et al. discloses this feature and cited column 2, lines 47-63, of Bowman et al. for support (Office Action, paragraph 19). Applicants respectfully disagree for at least reasons similar to reasons given with regard to claim 9.

For at least these reasons, Applicants submit that claim 18 is not anticipated by Bowman et al. Claim 19 depends from claim 18 and is, therefore, not anticipated by Bowman et al. for at least the reasons given with regard to claim 18.

Amended independent claim 21 recites features similar to, yet possibly different in scope from, features recited in claim 18. Claim 21 is, therefore, not anticipated by Bowman et al. for at least reasons similar to reasons given with regard to claim 18.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-5, 7, 9, 12, 14-19, and 21 under 35 U.S.C. § 102(b) based on Bowman et al.

REJECTION UNDER 35 U.S.C. § 103(a) BASED ON BOWMAN ET AL. AND HOVY ET AL.

In paragraphs 22-24 of the Office Action, the Examiner rejected claims 6, 8, and 20 under 35 U.S.C. § 103(a) as allegedly unpatentable over Bowman et al. in view of Hovy et al. Applicants respectfully traverse the rejection.

Claims 6 and 8 depend from claim 1, and claim 20 depends from claim 18. Without acquiescing in the Examiner's rejection with regard to claims 6, 8, and 20, Applicants submit that the disclosure of Hovy et al. does not cure the deficiencies in the disclosure of Bowman et al. identified above with regard to claims 1 and 18. Therefore, claims 6, 8, and 20 are patentable over Bowman et al. and Hovy et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claims 1 and 18.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 6, 8, and 20 under 35 U.S.C. § 103(a) based on <u>Bowman et al.</u> and <u>Hovy et al.</u>

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REJECTION UNDER 35 U.S.C. § 103(a) BASED ON
<u>BOWMAN ET AL.</u> AND <u>CHANEY ET AL.</u>

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In paragraphs 25 and 26 of the Office Action, the Examiner rejected claim 11 under 35 U.S.C. § 103(a) as allegedly unpatentable over <u>Bowman et al.</u> in view of <u>Chaney et al.</u> Applicants respectfully traverse the rejection.

Claim 11 depends from claim 1. Without acquiescing in the Examiner's rejection with regard to claim 11, Applicants submit that the disclosure of <u>Chaney et al.</u> does not cure the deficiencies in the disclosure of <u>Bowman et al.</u> identified above with regard to claim 1. Therefore, claim 11 is patentable over <u>Bowman et al.</u> and <u>Chaney et al.</u>, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 11 under 35 U.S.C. § 103(a) based on <u>Bowman et al.</u> and <u>Chaney et al.</u>

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REJECTION UNDER 35 U.S.C. § 103(a) BASED ON
<u>BOWMAN ET AL.</u> AND <u>SCHULTZ.</u>

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In paragraph 27 of the Office Action, the Examiner rejected claim 13 under 35 U.S.C. § 103(a) as allegedly unpatentable over <u>Bowman et al.</u> in view of <u>Schultz.</u> Applicants respectfully traverse the rejection.

Claim 13 depends from claim 1. Without acquiescing in the Examiner's rejection with regard to claim 13, Applicants submit that the disclosure of Schultz does not cure the deficiencies in the disclosure of Bowman et al. identified above with regard to claim 1. Therefore, claim 13 is patentable over Bowman et al. and Schultz, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 13 under 35 U.S.C. § 103(a) based on Bowman et al. and Schultz.

REJECTION UNDER 35 U.S.C. § 103(a) BASED ON BOWMAN ET AL. AND THOMPSON ET AL.

In paragraph 27 of the Office Action, the Examiner rejected claims 10 and 22 under 35 U.S.C. § 103(a) as allegedly unpatentable over Bowman et al. in view of Thompson et al. Applicants respectfully traverse the rejection.

Initially, claim 10 depends from claim 1. Applicants submit that the disclosure of Thompson et al. does not cure the deficiencies in the disclosure of Bowman et al. identified above with regard to claim 1. Therefore, claim 10 is patentable over Bowman et al. and Thompson et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

Claim 10 is also patentable over Bowman et al. and Thompson et al. for reasons of its own. Claim 10 recites modifying the received search query to include a restrict identifier that restricts the search to a particular domain associated with the entity name when the entity name is determined not to correspond to one of the common words or phrases.

Neither <u>Bowman et al.</u> nor <u>Thompson et al.</u>, whether taken alone or in any reasonable combination, discloses or suggests this feature. The Examiner admitted that <u>Bowman et al.</u> does not disclose modifying a receives search query to include a restrict identifier associated with an entity name when the entity name is determined not to be associated with a common word or phrase, but alleged that <u>Thompson et al.</u> discloses this feature and cited the portion of page 136, second column, that relates to a proximity operator (Office Action, paragraph 27). Without acquiescing in the Examiner's allegation, Applicants submit that <u>Thompson et al.</u> does not disclose or remotely suggest modifying the received search query to include a restrict identifier that restricts the search to a particular domain associated with the entity name when the entity name is determined not to correspond to one of the common words or phrases, as recited in amended claim 10.

At page 136, second column, <u>Thompson et al.</u> discloses:

> For example, in the query Cases involving *jailhouse lawyer Joe Woods*, the baseline search treated *Joe* and *Woods* as independent concepts. *Joe* occurred in 7,669 documents within the 410,883 document test collection and had a normalized idf of 0.31. *Woods* occurred in 18,064 documents and had an idf of 0.24. The ordered proximity search treated *Joe Woods* as a single concept in which the terms comprising the concept were proximally ordered. *Joe +2 Woods* occurred in 17 documents and had an idf of 0.78. By treating *Joe Woods* in this manner, the proximity search boosted the scores of documents containing references to the person *Joe Woods* and thereby improved search performance.

In this section, <u>Thompson et al.</u> discloses performing a proximity search to boost the scores of documents containing references to the person "Joe Woods." Nowhere in this section, or elsewhere, does <u>Thompson et al.</u> disclose or remotely suggest that a proximity search restricts a search to a particular domain, as would be required by claim 10. Thus, <u>Thompson et al.</u> cannot disclose or suggest modifying the received search query to

include a restrict identifier that restricts the search to a particular domain associated with the entity name when the entity name is determined not to correspond to one of the common words or phrases, as required by claim 10.

For at least these reasons, Applicants submit that claim 10 is patentable over Bowman et al. and Thompson et al., whether taken alone or in any reasonable combination.

Amended independent claim 22 recites features similar to, yet possibly different is scope from, features recited in claims 1 and 10. Therefore, claim 22 is patentable over Bowman et al. and Thompson et al., whether taken alone or in any reasonable combination, for at least reasons similar to reasons given with regard to claims 1 and 10. For example, Bowman et al. and Thompson et al. do not disclose or suggest determining whether an entity name included in a received search query corresponds to one of a plurality of common words or phrases, as recited in claim 22. Bowman et al. and Thompson et al. also do not disclose or suggest rewriting the received search query to include a restrict identifier that identifies a particular domain associated with the entity name, or performing a search for documents within the particular domain based on the rewritten search query to obtain second search results, as further recited in claim 22.

For at least these reasons, Applicants submit that claim 22 is patentable over Bowman et al. and Thompson et al., whether taken alone or in any reasonable combination.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 10 and 22 under 35 U.S.C. § 103(a) based on Bowman et al. and Thompson et al.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of the application and the timely allowance of pending claims 1-22.

As Applicants' remarks with respect to the Examiner's rejections overcome the rejections, Applicants' silence as to certain assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, assertions regarding dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or that such requirements have been met, and Applicants reserve the right to dispute these assertions/requirements in the future.

If the Examiner believes that the application is not now in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned to discuss any outstanding issues.

To the extent necessary, a petition for an extension of time under 37 C.F.R. §

1.136 is hereby made. Please charge any shortage in fees due in connection with the

filing of this paper, including extension of time fees, to Deposit Account No. 50-1070

and please credit any excess fees to such deposit account.

Respectfully submitted,

HARRITY SNYDER, L.L.P.

By: /Paul A. Harrity/
        Paul A. Harrity
        Registration No. 39,574

Date: January 18, 2007

11350 Random Hills Road
Suite 600
Fairfax, Virginia 22030
(571) 432-0800

Customer Number: 44989